STATE BUILDING CODE INTERPRETATION NO. I-9-05

August 1, 2005

The following is offered in response to your July 14, 2005 letter to me in which you seek a formal interpretation of the provisions of the 2002 National Electrical Code portion of the 1999 State Building Code as it relates to wiring within self-contained, packaged spas and hot tubs.

Question: Is it the intent of the 1999 State Building Code that article 680.23 or 680.33 of the 2002 National Electrical Code (NEC) apply to underwater light fixtures that are installed at the factory in a self-contained, packaged spa or hot tub?

Answer: No. The intent of the code with respect to this issue is found at Section 2701.1 of the BOCA National Building Code/1996 portion of the 1999 State Building Code, which is the document that provides the path, by reference, to the 2002 NEC. Section 2701.1 states, in part, that the requirements of the 2002 NEC apply to the installation of electrical conductors, equipment and systems in buildings or structures. The NEC defines electrical equipment as a general term to describe the parts that make up an electrical installation such as conductors, devices, fixtures, apparatus and appliances. While it is the intention of the code to apply to the installation of, and connections to appliances, it is not the intention of the code to regulate the appliance itself. Since a self-contained, packaged spa or hot tub is a listed assembly of parts constructed in a factory environment, the NEC does not apply to the wiring within the appliance, no more than it would apply to the internal workings of a toaster, even though the NEC does regulate the receptacle from which the toaster derives its power. The requirements of article 680.23 or 680.33 would, however, apply to any after-market lighting that was added to an existing self-contained packaged spa or hot tub. One would also have to ascertain that such addition of an after-market device would not void the original listing of the product.

The NEC is also applicable to the wiring and device that supplies power to the spa or hot tub just as other portions of the State Building Code apply to the location of the spa or hot tub, such as the ability of the structure to support the additional dead load, any glazing located in proximity to the spa or hot tub and the need for a barrier or approved safety cover, to name a few.